Commentary

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Geriatricians are pioneers in the field of care to a new generation of patients, namely the very old. As stressed by Dr. Goodwin (1), this population class is really heterogeneous, but its main characteristic is the ability to survive, while the frail elderly die earlier. This natural process selects the more robust. Furthermore, the inclusion criteria in most of the randomized studies are so numerous that the selected participants constitute without doubt a particular and even more vigorous sample of the very old. Considering this reality, the author's provocative geriatrician point of view is really challenging, because the latter discusses ''evidence-based medicine'' data to better manage the growing number of older hypertensive and comorbid patients the geriatrician cares for in his daily practice.

Goodwin's current courageous counter-approach raises many interesting questions concerning, in particular, changes of the cardiovascular risk profile of the very old population. In the 80 years and older population, cardiovascular risk is poorly related to hypercholesterolemia or elevated mean blood pressure, but positively associated with pulse pressure and increased arterial stiffness (2,3). Furthermore, among other bad predictors, neck murmurs were mentioned in women, historical heart failure, proteinuria, and tachycardia in men, and historical stroke and myocardial infarction, pulmonary disease, left ventricular hypertrophy, diabetes, and uricemia in both genders (3).

Considering these age-related risk factor changes and comorbidity roles in the very old, it is interesting to stress that, in Goodwin's sources of information, no mention was made of:

- Pulse pressure values, which appear to be extremely valuable epidemiological data to evaluate the impact of blood pressure treatment (4), or
- Multiple cardiovascular and noncardiovascular history and comorbidity of the treated and nontreated hypertensive very old population.

Moreover, side effects of antihypertensive treatments are dependent of both:

- The choice of antihypertensive drug or drug association, its pharmacological actions (volume depletion, hormone blockage, or vascular impact), dosage, and tolerance.
- The patient himself/herself with his/her comorbidity (particularly psychogeriatric disturbances and his/her drug sensibility, but also of his/her drug compliance and the quality of patient follow-up by the doctor).

Taken together, these difficulties indicate that only new paradigms, as proposed by Goodwin (1), and new prospective studies should be developed to respond to the 2 questions:

1. What is the ''blood pressure'' threshold to treat or not to treat?
2. What are the most powerful drugs capable to reduce cardiovascular morbidity and mortality?

To our knowledge, for such studies, any new approach should take into account the following points:

- The real clinical difficulty to determine blood pressure in elderly people. Incidentally, we understand that blood pressure was only measured once in the follow-up survival study by Boshuizen and colleagues (5). Is there any better way of including, treating, and managing the follow-up of arterial hypertension, notably in the very old?
- When arterial stiffness is taken into account in epidemiological studies, the role of blood pressure itself, as a cardiovascular risk factor, disappears, while the independent predictive role of arterial stiffness and wave reflections appear clearly in these old patients (2).

- Finally, whereas many drugs are able to decrease mean blood pressure, basic research never developed (with some exceptions) drugs able to reduce independently large artery stiffness (6,7).

Here is the new paradigm derived from Dr. Goodwin's analysis.

References

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